

Organic Farming Policy 2005
Ministry of Agriculture,
Department of Agriculture & Cooperation

1. Background

1.1 The Agriculture Sector in India has made enormous stride in the past 50 years. The Green Revolution has been the cornerstone of India's agricultural achievement, transforming the country from the stage of food deficiency to self-sufficiency by use of high yielding varieties and higher level of inputs of fertilisers and plant protection chemicals. During the post Green Revolution period, the production of food grains has increased four-folds, from 50.82 million tonnes in 1950-51 to 212.05 million tonnes on 2003-04. But indiscriminate and excessive use of chemicals during this period has put forth a question mark on sustainability of agriculture in the long run calling attention for sustainable production, which shall address social, ecological and economical issues together.

1.2 Recognising the adverse impact of excessive use of chemicals on soil health and human health, there has been a realization for integrated management system. Since organic farming addresses soil health, human health and environmental health and is eco-friendly, appears to be one of the options for sustainability. Therefore, organic farming is receiving a focused attention of Government of India.

2. Aims and Objectives

2.1 Organic agriculture in India has its roots in traditional agricultural practices that evolved in countless villages and farming communities over the millennium. India is endowed with various types of naturally available organic form of nutrients in different parts of the country and it will help for organic cultivation of crops substantially. Moreover India has competitive advantage in the market due to low production cost and availability of diverse climate to grow a large number of crops around the year.

2.2 The Policy of Ministry of Agriculture on organic farming will seek to promote technically sound, economically viable, environmentally non-degrading, and socially acceptable use of natural resources in favour of organic agriculture. The Policy seeks to actualize the area and crop potential for organic farming, sustaining soil fertility, conserving bio-resources, strengthening rural economy, promoting value addition,

accelerating the growth of agro-business and securing a fair standard of living for the farmers and agricultural workers and their families.

2.3 Based on the above, the objectives of the Policy on organic farming are as follows:

- (a) Maintenance of soil fertility by encouraging and enhancing the biological cycle within farming systems involving micro-organisms, soil flora and fauna, plants and animals.
- (b) Identification of areas and crops suitable for organic farming.
- (c) Development of organic package of practices.
- (d) Setting up of model organic farms for getting seed material for organic cultivation.
- (e) Assurance of production and supply of quality organic input.
- (f) Adoption of biological methods for pest and disease control.
- (g) Adoption of biological and mechanical methods for weed management.
- (h) Harnessing of traditional and indigenous knowledge relating to organic farming.
- (i) Creation of awareness among farmers towards organic agriculture.
- (j) Development of Domestic market for organic produce.
- (k) Improvement of farmers' income through production of quality produce.
- (l) Generation of rural employment opportunity.
- (m) Simplification of certification system and recognition of adequate certification agencies, specially for domestic market.
- (n) Promotion of group certification.
- (o) Maintaining a diversity of plant and animal species as a basis for ecological balance and economic stability.
- (p) Improvement in condition of livestock that allow them to perform all aspects of their innate behaviour.
- (q) Development of regulatory mechanism for various organic input and organic produce.

3. Thrust Areas

3.1 Maintenance of soil fertility by using natural resource:

3.1.1. Imbalance in nutrient supply through chemicals has created lot of soil related problems and widespread micronutrient deficiency under intensive cropping system. The policy on organic farming will encourage the use of crop rotations and manures to maintain soil fertility. Green manuring, mulching and inter cropping of legumes is

- another important aspect with regard to adding fertility, reducing the leaching of nutrients as well as soil erosion.
- 3.1.2. The policy will give importance on conserving soil organic matter and biotic life, minimum tillage practices etc.
 - 3.1.3 Efforts should be made to ensure supply of organic manures like Farm Yard Manure, poultry manure, urban compost, rural compost, biogas slurry etc. for improvement and maintenance of soil organic matter which ultimately improve soil structure and enhance nutrient supply.
 - 3.1.4 About 30-35% of applied Nitrogen and Phosphorous, 70-80% of applied potassium are retained in the residues of food crops making them potential source of plant nutrients. The Organic farming policy will encourage recycling of crop residues for its incorporation into the soil.
 - 3.1.5 The farm waste can be converted into vermi-compost by earthworms. The most popular species of earthworm is *Eisenia Foetida* – surface litter dweller that multiplies throughout the year. Other earthworm species are also included. The policy of Ministry of Agriculture on organic farming would focus on the use of earthworms for composting purpose.
 - 3.1.6 Bio-fertilisers containing living micro-organisms are renewable energy resources, pollution free and cost effective supplement to chemical fertilisers. Strains of bacteria, algae, and fungi used in bio-fertilisers are known to have capacity of fixing atmospheric Nitrogen or solubilising soil phosphorous for stimulating plant growth through synthesis of growth promoting substances. The policy will encourage the production of bio-fertilisers like Rhizobium, Azospirillum, Azotobacter, VAM, BGA, Azolla, etc. on mass scale. It will support also use of biodynamic preparations, seaweed etc.
 - 3.1.7 A nation wide programme for utilization of rural and urban garbage, farm residues and organic waste for organic matter repletion will be worked out.

3.2 **Biological control of pest and diseases :**

India losses about 20-30% of its crops due to pest and diseases each year. As the widespread use of chemical pesticides has lead to a number of problems causing serious concern on human health, efforts will be made on biological pest management which includes collection of biotic agents namely, parasitoids and predators, isolation of antagonizing microbial organisms, mass production of biotic agents and microbial pesticides and use of botanical pesticides.

3.3 Biological and mechanical control of weeds :

Weeds are detrimental to crop growth as they compete with crop plants for light, air, moisture and nutrients and affect their growth and yield potential. The policy will promote biological control of weeds using natural enemies. Simultaneously, cultural and physical control will be encouraged.

3.4 Harnessing of traditional and indigenous knowledge :

The history and traditional knowledge of agriculture particularly of tribal communities, relating to organic farming and preservation and processing of food for nutritional and medicinal purposes is one of the oldest in the world. Concerted efforts will be made to pool, distill and evaluate traditional practices, knowledge and wisdom and to harness them for sustainable agricultural growth. Simultaneously, indigenous process like use of Amritpani, Panchagalya, etc. will be evaluated scientifically.

3.5 Area approach

3.5.1 The net sowing area of the country is 141 million hectare. The area having very low level of fertiliser consumption, namely dryland/rainfed areas, hilly areas, and north eastern States are most suitable for conversion to organic farming. The dryland /rainfed agriculture which constitutes about 60% of the net sown area could play an important role for organic farming as average fertiliser use in this area is very low (25-35 kg/ha as compared to national average of 89.8 kg per ha).

3.5.2 Hill agriculture is by and large natural farming except in valleys and high value crops. The hills show medium fertility level and heavy nutrient removal annually with little replenishment. Uttaranchal and Himachal Pradesh show high mining of potassium followed by Nitrogen and Phosphorous. Some of the districts of Uttaranchal and NE States use negligible fertiliser (less than 5 kg/ha fertilisers).

3.5.3 In fact, India is endowed with all types of climatic conditions ranging from arid to humid and tropical to temperate. The rainfall and temperature vary considerably from region to region besides the soil and land topography including the vegetation. Considering the varied agro-climatic conditions the country has been divided into 15 agro-climatic regions which provide the opportunity to cultivate a variety of crops.

3.5.4 Based on above, 3 priority zones for organic farming have been identified:

Category 1: Are those areas which are rainfed and mostly under monocrop and traditionally no chemical input has ever been used. They can easily be classified as organic produce areas. Broadly, these areas exist in the States of N.E. Region, Jharkhand, Uttaranchal and Rajasthan.

Category-II: Are those areas primarily under rainfed farming having little irrigation support. These are normally under monocropping rarely under double cropping. Broadly the States of Orissa, HP, J&K, MP, Chattisgarh and Gujarat and also parts of Maharashtra and Karnataka will fall under this category.

Category-III: Are those areas which have moderate to heavy use of chemical fertilisers as well as pesticides. The areas are mostly under multiple cropping. The conversion of these areas into organic farming will initially cause some loss of productivity. For these areas balanced and conjunctive use of biomass, organic and inorganic fertilisers and controlled use of chemicals through integrated nutrient and pest management (INM & IPM) will be promoted to achieve the sustainable increases in agricultural production.

3.6 Identification of crops:

3.6.1 Indian organic agriculture accounts for a very negligible part of total agricultural production in the country. Though very nascent the Indian organic sector is growing very rapidly and has already made inroads into the world organic market in certain key sectors such as tea, coffee, spices, fruits, vegetables, cotton, cereals, oilseeds, pulses, etc. Based on above, thrust will be given to grow the following crops organically.

- i. Major horticultural crops including vegetables. It will include mainly grapes, banana, mango, papaya, pineapple, guava, passion fruits, mausambi, orange, cashewnut, walnut and fresh vegetables.
- ii. Export oriented cereals like basmati rice, and few others like sorghum and pearl millets.
- iii. All pulses, soybean, groundnut and cotton.
- iv. Chillies, garlic, turmeric, coriander, ginger

3.6.2 Presently, the area under pulses, soyabean, groundnut, cotton is 20.03, 6.42, 6.73 and 8.58 million ha (total 41.76 million ha) If 10% of all these area including horticultural crops are considered for organic, about

4-6 million ha can be converted under organic area by 2008-10. However, organic farming *per se* could not be promoted for food basket crops like rice and wheat in the country except in cases of contracted organic farming for export purposes.

3.7 Rural Income Generation:

3.7.1 Organic farming offers the most effective opportunity for generation employment and income in rural areas. Organic farming is sustainable farming and therefore depends on locally available inputs as fertilisers. The policy of the ministry will encourage on-farm production of organic manure, compost, vermi-compost, azolla, blue green algae by farmers. Local manufacturing means no packing or transport cost. Therefore it will save the money of the farmer

3.7.2 The organic agriculture movement offers farmers new possibilities for helping themselves. Organic agriculture, with its emphasis on local resources and local ecological knowledge, bring farmers together in their communities. Organic farmers and consumer groups work to support markets, cut out monopolies and increase farm income.

3.7.3 Organic beekeeping as well as organic honey have growing demand and it may generate rural income sufficiently.

3.7.4 Organic produce gets high premium and this will increase farm income. The policy will encourage farmers for generating higher income with organic produce.

3.8 Market Development and Domestic Certification:

3.8.1 While considering the organic scene in India, it is very important to rationalize the importance of domestic market development. Efforts should be made to develop organic Bazaar as a local marketing programme which will provide assured organic products, fair prices for producers and consumers and opportunities for new relationship between producers and consumers. Simultaneously, the product of organic producer will be linked with Agri Export Zone.

3.8.2 The existing certification system is alien to the Indian farmers. The procedure needs to be simplified. Approach should be made to develop 'Participator Guarantee System' for domestic certification purpose where there will be interactive participation of small farmers, enterprises, traders and consumers.

3.8.3 A majority of agricultural producers are small and medium farmers and often located in remote areas which take them long travel and time to reach places for selling their products. The policy encourages group certification process to overcome the economical difficulties of the farmers.

3.9 Promotion:

3.9.1 Promotion of organic farming involves educating the farmers about its benefits. The State Governments should take up awareness campaigns and use media. It would be necessary to familiarize all extension staff, farmers etc. about the concept and practices of organic farming.

3.9.2 Facility should be provided for organizing training programme for farmers and NGOs not only in organic agricultural methods, but also on how to sell, promote and diversify their markets and how to fulfill certification requirements as per NPOP.

3.10 Bio-diversity:

3.10.1 Establishing bio-diversity with plant species of the local area is a key factor for successful organic farming. A combination of tree crop species to meet fodder/timber/fuel and biomass demand apart from providing habitat for birds and beneficial insects would go a long way in ensuring the sustainability of agriculture system under consideration.

3.10.2 Approach should be made to identify appropriate plant/tree species. Agri-Horti-Silvi-Pastoral-fodder system would be encouraged on individual farm.

3.11 Information Generation:

3.11.1 Generating of database is important to overcome the knowledge gap by quickly producing basic information tailored to various ecological zones of the country on the current state of knowledge on organic crop production packages, input production and utilization and certification issues, including legal and institutional aspects. Facility should be created to develop a comprehensive package of information and know-how to promote organic agriculture as a means of enhancing livelihood opportunity for small and marginal farmers.

3.12 Regulatory mechanism:

Adoption of organic agriculture necessarily involves a sequence of steps that need to be followed by the growers and verified by certification and inspection agencies. This is necessary to ensure that the consumer is not duped and genuine organic cultivator is not put to disadvantage.

4. National Project on Organic Farming:

4.1 As per suggestions of National Steering Committee on Planning Commission and recommendations made by the Task Force on Organic Farming, DAC has launched a new Central Sector Scheme, "National Project on Organic Farming" which has been approved by Planning Commission during X Plan on pilot basis with an outlay of Rs. 57.05 crore. The project is operational since 1st October, 2004. The objective of the project is as follows:-

- i. To facilitate, encourage and promote development of organic agriculture in the country.
- ii. To prepare inventory of organic resources available for recycling in agriculture in different agroclimatic regions.
- iii. To encourage production of organic sources of nutrients like biofertilisers, organic manures, compost etc. and biopesticides, biocontrol agents, etc as certified inputs of organic farming.
- iv. To act as nodal agency for formulation of standards and mechanism of accreditation, inspection, regulation, quality control and monitoring.
- v. To initiate and encourage research for promotion of organic agriculture practices and the dissemination of know-how through extension.
- vi. To coordinate and liaise with Ministries, Department of Governments and agencies, private sectors, farming communities, NGOs, international agencies and organizations involved in organic farming and marketing as a central nodal agency to ensure conveyance of all organic agricultural schemes into the NCOF.
- vii. To impart training to Accreditation and Certification agencies, farmers, industries and organizations engaged in the production, promotion and marketing of different components of organic farming.
- viii. To provide the financial support to State Governments, organizations, NGOs etc. for production and promotion of organic inputs and market development of organic produce.
- ix. To compile information on status of organic farming in the country, identify crops and areas and assess market for demand and supply of organic produce.

4.2 The components of the National Project on Organic Farming are as below:-

1. Construction of building for NCOF/RCOFs
2. Capacity building for promotion of organic farming through service providers.
3. Financial assistance for setting up of production units of:
 - i) Fruit/vegetable compost units;
 - ii) Biofertilisers units;
 - iii) Vermi-culture hatcheries
4. Training programmes for:-
 - i) Certification and Inspection Agencies/Service Providers.
 - ii) Organic input production and quality control.
 - iii) Extension officers/Field functionaries.
 - iv) Farmers Training on Organic Farming
 - v) Trainers Training & International cooperation.
5. Field demonstrations:
 - i) On organic inputs including vermicompost/city compost.
 - ii) Setting up of model organic farms.
 - iii) Utilisation of enriched biogas slurry.
6. Market Development and promotion:
 - i) Development of Technical packages; its dissemination and market development.
 - ii) Development of new initiatives
 - iii) Dissemination of proven technology.
 - iv) Creating National Awareness through International/ National/ Regional Seminar/ exhibitions etc. and publicity through print and electronic media.